IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of:	
Helmut MANGOLD et al.	
Application No. 10/020,920	Art Unit: 1793 Examiner: N.Y. M. Nguyen
Confirmation No. 8866	
Filed: December 19, 2001	Atty. Docket No.: 39509- 176287
For: PYROGENIC OXIDES DOPED WITH POTASSIUM	Customer No. **26694** U.S. PATENT & TRADEMARK OFFICE

AMENDED APPEAL BRIEF

Sir:

This is in response to a Notification of Non-Compliant Appeal Brief dated July 21, 2008. The initial response due date is August 21, 2008. Pursuant M.P.E.P. 1205.03, a new section **(4) STATUS OF AMENDMENTS** and a new section **(5) SUMMARY OF THE CLAIMED INVENTION** is enclosed.

Applicant believes no fees are required. The Commissioner is hereby authorized to charge any additional fee or credit overpayments to Deposit Account No. 22-0261 for the purposes of maintaining the pending status of this application.

(4) STATUS OF AMENDMENTS

After the final Office Action dated August 16, 2007, Appellants filed the Notice of Appeal. No amendments were filed after the final Office Action that is being appealed.

(5) SUMMARY OF THE CLAIMED INVENTION[1]

There are three independent claims: claims 1, 4 and 10. Claim 1 is directed to spherically shaped potassium doped pyrogenically produced metal or metalloid oxide particles having a breadth of particle size of at least 0.7. See page 2 at lines 14-15. Also see Example 7 (pp.17-18), Table 4 (pp.27 and 28) and Figures 11 to 13). Claims 4 and 10 are directed to two-step methods for the preparation of the product described in claim 1. See page 3 at lines 4-18. The actual steps are the same. The difference between claim 4 is open to the presence of other steps while claim 10 is closed. the is the transition phrase. Claim 4 is Claim 4 ("comprising") requires the performance of at least the enumerated steps. Claim 10 ("consisting of") the performance is limited to the two enumerated steps. These steps are the same.

Claim 1 further characterizes the particles as having 1) uniformily distributed potassium having a concentration from about 0.03 to 20% by weight (see page 1, lines14-15), 2) BET surface between 1 and 1000 m^2/g (see page 2 at line 3) and 3) a pH of more than 5, when the particles were present in a four percent dispersion (see page 2, line 17).[2]

Claim 4 describes a two step process. The first step is the feeding of an aerosol-gaseous mixture into a flame under conditions suitable for producing pyrogenic oxides by flame oxidation or flame hydrolysis to form the potassium-doped pyrogenic oxide spherical particle

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[1] The instant specification discusses the unexpected nature of the morphological changes in potassium doped pyrogenically produced silica particles first seen at a minimum potassium concentration. The morphological change in particle concentration permits one to achieve the claimed narrow particle size distribution in a two step process without the need of filtration. Such a narrow distribution of particle sizes was not recognized for potassium doped pyrogenically produced silica prior to Appellants' work.

[2] The product is suitable for chemical mechanical polishing (CMP) applications. (See, for example, page 4 of the specification in the paragraph starting at line 17.)

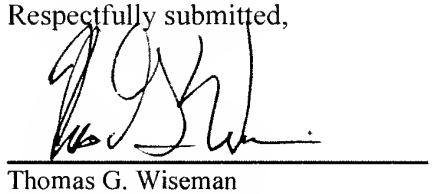
product having a distribution of particle size of at least 0.7. The second step is the direct recovery of the identified pyrogenic-doped oxide particle product directly from the reacted aerosol-gaseous mixture. Claim 4 specifies the use of an aerosol with a concentration of a potassium salt of more than 0.5% by wt. (See, for example, page 3 of the specification at lines 4-18).[3] The process is exemplified in Examples 2-7. See Table 1 for conditions. See Table 2 for the recovered product characteristics. Claim 4 permits the presence of other steps due to its use of "comprising."

Claim 10 describes a process similar to that of claim 4. Support for the process is the same as that set forth for claim 4 above. Claim 10 employs the closed transition phrase "consisting of" in contrast to claim 4 which employs the open transition phrase "comprising". Therefore, claim 10 is limited to the two enumerated steps.

CONCLUSION

For the reasons set forth above and in the Appeal Brief, it is respectfully submitted that claims 1-7 and 9-11 are patentable over CA 2,223,377 taken in view of Vanell (6,423,638) or Hall et al. (US 6,372,648). Accordingly, the Examiner's rejection of these claims should be reversed.

Respectfully submitted,



Date: August 8, 2008

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[3] The morphology changes and narrow distribution of particles are apparent from Figures 11A -13B (Table 4 and Example 7 (20% potassium dopant)). Figures 8A-10B (Table 3 and Example 1) illustrate the results obtained in the absence of a dopant.